



SWARC NEWS

Notes from KO4ZFO (Rodney)

Happy July 4th all! I hope you all had a wonderful and safe holiday. I would also like to thank Steve Suzanne for filling in this week at our monthly meeting. Next month we will have our presentation on Public Service, so please mark that on your calendar. Also, we are always looking for backup net controllers.

If you are interested, please let me know.

Our annual dues year expires on 30 June 2023, so it's time to renew. Except for those who joined during RARSfest, or during one of the last two months, everyone else will need to submit payment of \$30 per member with additional \$5 per family member in early July. There are a lot of folks on our email list that have not renewed in some time. We ask that you send an email to info@southwakearc.com stating your intentions/desires, e.g., are you renewing or wish to be dropped. Regrettably, those unpaid by 1 August will be dropped.

We ask you to keep the following in your thoughts and prayers:

Gary, KO4LQX, Kenny, KJ4CVK, Velda, K4VJC, Mike, KD4MC, and Steve, KA0GMY.

Steve, KA0GMY, continues to have health issues, so remember him, Steve Jr., and Miss Gloria as well (particularly).



SWARC NEWS

Gary Plante, KO4LQX, has finished six rounds chemo and immunotherapy treatments and will now only do immunotherapy every three weeks so this is good news. He is hoping to be able to build up his strength now that he is no longer doing chemo.

Velda, K4VJC, and Mike, KD4MC, have returned from Virginia (after almost a year) to their residence. Velda still has many challenges ahead so reach out to Mike and see how you can help in any way.

Kenny, KJ4CVK, is well for now, but he needs our prayers and support anyway.

SWARC de KO4ZFO

Notes from WB4SMS (Steve)

Thank you to all of the participants in this year's ARRL Field Day activities at the Legion and our home operators. I am looking forward to a great year. The Board is searching for a Membership Director for this year; as I have moved up in office, it left a vacancy in that role. If you are interested, please contact me and we will discuss the duties. I am currently working on planning the programs for our monthly meetings. If you have an idea for a presentation you would like to see, let me know. I have confirmation from Samantha with NC Emergency Management that she will be at our November meeting to hold a CERT informational meeting. A large majority of CERT members are Hams.

SWARC de WB4SMS



SWARC NEWS

SWARC 4 July 2023 Meeting Minutes

The meeting was well attended and there was plenty of food so that no one left hungry unless it was their own fault.

The meeting was conducted by Steve (WB4SMS), our VP, since our President was out of town. The Pledge of Allegiance was led by Brian (KK4BK).

Those in attendance were:

Richard Hall (K7RLH), Bill Blomgren (KK4QDZ), Al Crawford (WA4TCJ), Linda Crawford (KI4LO), Rich Gehle (N4DPQ), Brian Knox (KK4BK), Dave Krum (NW3U), Penny Krum, Steve Suzanne (WB4SMS), Ken Castille (KN4GUS), Don Nicholson (KN4OEY), Paul Nicholson (KN4NGI), Matt Price (KE4NIP), Gator (K4MWG), new member Steve Worth (NC4SW) and Dave Yow (K4MSE).

Old/Unfinished Business

The winners of the Field Day Raffle Drawing were announced: Linda Crawford (KI4LO) and Matt Price (KE4NIP). Neither of them asked for the full face value of our suggested \$250 prize so the club had a better showing in terms of profit even though falling short in ticket sales.

New Business

Ken Castille (KN4GUS) brought up the fact that NC POTA will be hosting a weekend dedicated to activating local parks on 9-10 September. He also suggested that we have any and all veterans that are hams to identify their branch of service and time served or conflict.



SWARC NEWS

So, if you are a veteran and would like to be identified as such as well as being a 'ham,' please send an email to: info@southwakearc.com and we will have recognition of all veterans (whether Legion members or not) at a later meeting (say November).

Neither of these suggestions required a vote; info only.

It was noted, with sadness, that Joe White (WA4GIR) became a SK over the past weekend. He had participated in the morning exam session on 1 July and later fell down his basement stairs at home and could not be revived. He was a long-time member of RARS and had been their exam leader for countless years along with his wife, Liz. He also was highly supportive of the other local test sessions sponsored by Laurel VEC. His memorial service will be on 29 July. The included link will give you more info. <https://www.dignitymemorial.com/obituaries/cary-nc/joseph-white-11355576>

During the past two weeks, Danny Hampton (K4ITL) brought to the club radio room the Kenwood TS-590 that he had promised earlier to donate for member use. It is a real nice addition to the shack equipment.

While returning some supplies to the radio room/shack, I noticed that we need to do some 'spring cleaning' and rid ourselves of obsolete or unused equipment that others might want if we sold them at one of the local swapfests.

Public Service



SWARC NEWS

Dave Krum (NW3U) noted that a bicycle event was held over the past weekend in Fuquay Varina; more events will follow in the fall.

Check the HPSNC.org web site often for Public Service opportunities. The public service season is upon us and events need volunteers. You may also get to public service events on the RARS website.

TREASURER'S REPORT

Christy Fernandini's emailed report showed an increase in the finances during June. Balance of \$2,389.51 with no obligated funds or invoices outstanding. Income from dues, raffle tickets sales and t-shirt sales totaled \$820 and expenses of \$57.13 included a reimbursement and two bank fees. The two Visa gift cards will be purchased soon and deducted from the available balance.

The meeting adjourned at 7:33 pm although members hung around to chat with each other.

Respectfully submitted,
Richard Hall K7RLH
Secretary



SWARC NEWS

MEMBERSHIP

You can bring a check or cash for dues to the next meeting or mail them to the club PO box and Christy will advise she has received them. Also, you can now renew somewhat online by contacting Christy and giving her the appropriate credit card info for the 'Square' account. Christy's email is christyfernandini@outlook.com. Make checks payable to South Wake ARC and send to South Wake ARC – PO Box 1565 – Fuquay Varina, NC 27526

NET REPORT

SWARC Group – June 2023

We have four individuals who are net check-in champs for June; they are Bill, KK4QDZ, Richard, K7RLH, Al, WA\$TCJ, and Al, WA3JJG. The monthly total of check-ins was 157—way down from last month! Note that **not** all net controls record their counts so numbers could actually be higher than recorded.

- Saturday and Sunday evenings will be called by KT4JR & K7RLH
- KO4ZFO will call Monday evenings
- KA0GMY will call Tuesday evenings (backup is K7RLH)
- KK4BK will call Wednesday evenings except on meeting nights
- KJ4CVK will call Thursday evenings
- Fridays will continue to be called by NC4MP
- And we need backups – JUST BECAUSE.



SWARC NEWS

Please contact Rodney Warren, KO4ZFO, or Kenny, KJ4CVK, if you are interested in calling one or more nets.

SWARC Mission Statement

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of its members. Further, it shall be our purpose to support the welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service. Refer to the SWARC web site for the Board of Directors/Officers and Appointed Positions.

LINKS (if you have other links you want added then send them to me)

PRN

A Wide Area Digital Amateur Radio Network

www.ncprn.net

GigaParts

www.gigaparts.com

QRZ

www.qrz.com

Ham Radio Outlet HRO

www.hamradio.com

Raleigh Amateur Radio Society RARS

www.rars.org

Johnson Amateur Radio Society JARS

www.jars.net



SWARC NEWS

South Wake Amateur Radio Club SWARC

www.southwakearc.com

Carolina 440 Network

www.carolina440.net

North Carolina Packet

www.ncpacket.com

TARPN (Terrestrial Amateur Packet Radio Net)

www.tarpn.net

Useful Ham Info

www.torborg.com/a

ARRL News

Dual Championship Weekend Ahead on HF

The IARU HF World Championships begin at 1200 UTC on Saturday, July 8, 2023, and run through 1159 UTC on Sunday, July 9.



Antenna teams set up for WRTC 2022. The 2022 event is being held in 2023 due to a COVID-19 delay. [Photo courtesy [WRTC 2022 on Facebook](#)]



SWARC NEWS

A station operating as IARU Headquarters will be operated from [ARRL The National Association for Amateur Radio®](https://www.arrl.org/) in the US, from Newington, Connecticut. ARRL is the IARU International Secretariat, having served as the "headquarters" of the IARU since its founding. The IARU HQ call sign is NU1AW, and the contest exchange will include "IARU." Operators will include volunteers from the ARRL staff.

Stations operating for ARRL Headquarters will be operated by member-volunteers from the Hawaiian Islands. W1AW/KH6 will be the ARRL HQ call sign, and it will operate on SSB from KH6YY on Oahu (<https://kh6yy.net>), and on CW from KH6LC on Hawaii (<https://www.kh6lc.com>). The exchange will include "ARRL." KH6YY is the station of Alex Benton, KH6YY, who sponsors the Pupukea Contest Station on a high ridge above Waimea Valley on the north shore of Oahu. KH6LC is the station of Lloyd Cabral, KH6LC, a competitive multi-operator contest station located on the Big Island.

In addition, stations operated by members of the IARU Administrative Council, the three IARU Regional Executive committees, and IARU member-society HQs will be on the air. HQ stations will send their member-society abbreviations. See <https://www.iaru.org/reference/member-societies/> for a list of IARU member-societies.

The World Radiosport Team Championship (WRTC) 2022 (rescheduled to 2023) is running in parallel with this event -- see <https://www.wrtc2022.it/> for more information.

IARU Administrative Council Met in Germany

The 58th meeting of the IARU Administrative Council (AC) was held in person at the SEE hotel in Friedrichshafen, Germany, on Sunday, June 25, and Monday, June 26, 2023.



SWARC NEWS

In matters related to World Radiocommunication Conference 2023 (WRC-23), the AC received reports on the Conference Preparatory Meeting, ITU-R Working Party 5A, and the latest updates regarding agenda items 1.2, 1.12, and the current status of agenda item 9.1b, which is about the radionavigation-satellite service (RNSS) and the 23-centimeter band.

On the subject of strategic planning, preliminary results from the work of the Relationship Working Group, Legal Working Group, and Finance Working Group were approved. Their work will continue to address a planned restructuring of IARU. An initial report will be presented at the Region 1 Conference in Zlatibor, Serbia, in November.

The AC received a report on the completion of the IARU officer consultative process regarding nominating candidates for the offices of President and Vice President for the 2024 - 2029 term. The nominees will be formally submitted to member-societies for ratification later this year.



Reports were received from IARU Beacon Project International Coordinator Peter Jennings, AB6WM/VE3SUN; Electromagnetic Compatibility Coordinator Martin Sach, G8KDF; Satellite Advisor Hans Blondeel Timmerman, PB2T, and Emergency Communications Special Advisor Rod Stafford, W6ROD.

The AC appointed Rick Palm, K1CE, Editor for the ARRL *ARES Letter*, as the IARU Special Advisor on Emergency Communications to assume the responsibilities of Rod Stafford, W6ROD, in representing IARU in the ITU Telecommunication Development Sector.

Gaspar Miró, EA6AMM, presented a report on the IARU Monitoring System and submitted a proposed revision to the current terms of reference (TOR). The AC will continue to review the proposal to consider a resolution to update the TOR.

A report was received on the successful 2023 World Amateur Radio Day that supported the United Nations initiative to promote Human Security for All (HS4A).

Preliminary thoughts on how to celebrate the 100th anniversary of IARU, founded in Paris in 1925, were exchanged.

Nominations for the IARU Michael J. Owen, VK3KI, Award and the IARU Diamond Award were received.

Members attending the meeting were IARU President Tim Ellam, VE6SH/G4HUA; IARU Vice President Ole Garpestad, LA2RR; IARU Secretary and ARRL Past President Joel Harrison, W5ZN; IARU Region 1 President Sylvain Azarian, F4GKR; IARU Region 2 President George Gorsline, VE3YV, and IARU Region 2 Secretary Rod Stafford, W6ROD; IARU Region 3 Co-



SWARC NEWS

Chairmen Ken Yamamoto, JA1CJP, and Yudi Hasbi, YD1PRY, also attended the meeting along with retired ARRL Chief Executive Officer and current IARU Assistant Secretary David Sumner, K1ZZ. IARU Region 1 Secretary Mats Espling, SM6EAN, sent his regrets for being unable to attend.

Thanks to IARU Secretary Joel Harrison, W5ZN, for this report.

W1VCM Receives Grant for the Vintage Radio and Communications Museum

The amateur radio club of the [Vintage Radio and Communications Museum of Connecticut](#), W1VCM, has received a grant to design and implement new antennas that cover frequency ranges available to US radio amateurs and add Earth-space capabilities to their shack.

"These new capabilities will allow club members to show the full range of technologies that make amateur radio the unique lifetime hobby it is," said club President Bob Allison, WB1GCM. "Over the years, these demonstrations have encouraged more than a few visitors to pursue their amateur radio licenses. These improvements will allow our visitors to better engage with technologies that impact their everyday lives," he added.



The museum is run by volunteers and it opened in September 1990. It is dedicated to the preservation of old-time communications equipment and to educating the public about communication systems of the past.

The new functionality will include computer-controlled tracking, a high-gain antenna system, and a new satellite transceiver that allows communications to the International Space Station and several low-Earth orbit amateur satellites.

Vintage Radio and Communications Museum of Connecticut Director John Ellsworth emphasized the importance of the amateur radio club as part of the story of communications, stating, "During our docent-led tours, we discuss the history and development of radio and television. Having a working radio station available reinforces many of the topics discussed."

The grant was awarded by [Amateur Radio Digital Communications](#).



SWARC NEWS

Amateur Radio in the News

ARRL Public Information Officers, Coordinators, and many other member-volunteers help keep amateur radio and ARRL [in the news](#).

["In the age of smartphones, what keeps Durango Amateur Radio Club going strong?"](#) / The Durango Herald (Colorado) July 2, 2023 -- *The Durango Amateur Radio Club is an ARRL Affiliated Club.*

["Making connections: Ashe County Amateur Radio Club makes over 340 contacts in 24 hours"](#) / Mountain Times.com (North Carolina) July 2, 2023 -- *The Ashe County Amateur Radio Club is an ARRL Affiliated Club.*

[Share](#) any amateur radio media hits you spot with us.

ARRL Podcasts

On the Air

Sponsored by [Icom](#)

For the June 2023 episode of the On the Air podcast, ARRL Radiosport & Regulatory Information Manager Bart Jahnke, W9JJ, and ARRL Contest Program Manager Paul Bourque, N1SFE, join us to talk about a popular Field Day fixture known as the GOTA (Get On the Air) Station, a beginner-friendly station that get licensees - and even the ham -curious public - on the air with knowledgeable licensee literally standing by.



ARRL Audio News

Listen to [ARRL Audio News](#), available every Friday. ARRL Audio News is a summary of the week's top news stories in the world of amateur radio and ARRL, along with interviews and other features.

The On the Air podcast is available on iTunes (iOS) and Stitcher (Android). The On the Air podcast and ARRL Audio News are also on blubrry -- [On the Air](#) | [ARRL Audio News](#).



Announcements

NASA has announced the earliest targeted launch date of Tuesday, August 15, for their seventh rotational mission of sending a SpaceX Dragon crew spacecraft and Falcon 9 rocket to the International Space Station. The launch of Dragon, named Endurance, will take



SWARC NEWS

place from Launch Complex 39A at Kennedy Space Center in Florida and will carry NASA astronaut and mission commander Jasmin Moghbeli, KI5WSL, and European Space Agency astronaut and pilot Andreas Mogensen, KG5GCZ. Japan Aerospace Exploration Agency astronaut Satoshi Furukawa and Roscosmos cosmonaut Konstantin Borisov will also be on-board as mission specialists. This is the first spaceflight for Moghbeli and Borisov, and it is Mogensen and Furukawa's second flight. Following a handover period, crew members from [NASA's SpaceX Crew-6 mission](#) are scheduled to return to Earth aboard their SpaceX Dragon spacecraft named Endeavour. For launch coverage and more information about the mission, visit <https://www.nasa.gov/commercialcrew>.

In Brief...

Morse Code is still thriving in amateur radio, 24 years after its last commercial use. On July 12, 1999, the original dot/dash system, invented by Samuel F. B. Morse in 1837, gave way to the rapid development of analog and digital communications. The final message sent in Morse code for commercial use was the same one that Morse hammered out on his telegraph key 155 years earlier in 1844, which was, "What hath God wrought?" But this time the message was followed by SK, meaning silent key, or deceased. The International Maritime Organization replaced Morse code with the Global Maritime Distress and Safety System -- an automated ship-to-shore and ship-to-ship system that use satellites and/or terrestrial radio systems with digital selective calling technology. Morse Code is also still used in aviation. Pilots listen to a Morse code identifier to verify that their navigation receivers are tuned to the correct radio aid, such as a VHF Omni-Directional Range (VOR) or Instrument Landing System (ILS) approach guidance system. Railroads stopped using Morse code in the mid-1970s. While Morse code is no longer used commercially, it is still an integral part of amateur radio. Amateur radio operators are no longer required to learn Morse code to obtain their license, but many learn the code on their own or by using study guides and taking classes. Every day, amateurs around the world use Morse code to communicate with each other, test their radio equipment, or pass along friendly information. Morse code is essential in helping people communicate during disasters and emergencies because of its signal ability to penetrate adverse weather issues and propagation disturbance. ARRL offers a variety of resources for those interested in learning Morse code. Visit <http://www.arrl.org/learning-morse-code> for more information.

[ARRL The National Association for Amateur Radio®](#) is on Threads, the new social media platform from Meta. Connect with your association via our handle [@arrlhq](#). Find all of our social channels and ways to connect at www.arrl.org/arrl-social-media

The K7RA Solar Update



SWARC NEWS

Tad Cook, K7RA, of Seattle, Washington, reports for this week's ARRL Propagation Bulletin, ARLP027:

According to Spaceweather.com, the average daily sunspot number for June 2023 was 163, which is the highest it's been in 21 years.

From a July 3, 2023, email:



Solar disk image taken July 6, 2023, courtesy of NASA SDO/HMI

"The average sunspot number in June 2023 hit a 21-year high. Solar Cycle 25 has shot past its predecessor, Solar Cycle 24, and may be on pace to rival some of the stronger cycles of the 20th century."

Could we see another Solar Cycle 19, the biggest in recorded history, that stretches back before the birth of radio?

From my own records, average daily sunspot numbers for April through June 2023 had a nice upward trend at 93.7, 125.8, and 143.9.

There was one new sunspot region on June 30, three more on July 1, one more on July 2, another on July 4, and one more on July 5.



SWARC NEWS

Sunspot and solar flux data this week did not track with each other again. The average daily sunspot number declined from 170 to 126.1, while the average daily solar flux rose slightly from 160.3 to 164.5.

Geomagnetic indicators were lower, with the average daily planetary A index declining from 10.7 to 7.3 and middle latitude averages declining from 9.9 to 8.

Predicted solar flux is 155 and 150 on July 6 - 7; 145 on July 8 - 11; 150 and 155 on July 12 - 13; 175 on July 14 - 18; 170 on July 19 - 21; 160 on July 22 - 23; 155 on July 24 - 25; 160 on July 26 - 27; 165 on July 28 - 29; 170, 170, and 165 on July 30 through August 1, and 155 on August 2 - 6.

Predicted planetary A index is 5 on July 6 - 7; 12 and 8 on July 8 - 9; 5 on July 10 - 11; 20 and 30 on July 12 - 13; 8 on July 14 - 22; 5 on July 23 - 30; 8 on July 31 through August 1, and 5 on August 2 - 4.

Check out Tamitha Skov's, WX6SWW, YouTube video from July 1 at <https://youtu.be/HR8mm30oxOQ>.

Read about a radio blackout at <http://bit.ly/46tTRT8>.

Sunspot numbers for June 29 through July 5, 2023, were 112, 187, 119, 126, 117, 121, and 101, with a mean of 126.1. The 10.7-centimeter flux was 162.2, 158.6, 165.5, 170.2, 173.2, 167.2, and 154.6, with a mean of 164.5. Estimated planetary A indices were 17, 8, 5, 5, 5, 4, and 7, with a mean of 7.3. Middle latitude A index was 13, 8, 6, 8, 7, 5, and 9, with a mean of 8.

Send your tips, questions, or comments to k7ra@arrrl.net.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean...", and [check out](#) the Propagation Page of Carl Luetzelschwab, K9LA.

A propagation bulletin [archive](#) is available. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.

[Share](#) your reports and observations.

A weekly, full report is posted on [ARRL News](#).

Just Ahead in Radiosport

Yearlong -- [ARRL Volunteers On the Air](#) (VOTA). See the State Activations Schedule for weekly [W1AW Portable Operations](#), including:



SWARC NEWS

- July 5 - July 13 -- Hawaii W1AW/KH6
- July 12 - July 18 - Wisconsin W1AW/9
- July 12 - July 18 - Utah W1AW/7
- July 12 - July 18 -- American Samoa W1AW/KH8

Upcoming Contests:

- July 6 - 7 -- Walk for the Bacon QRP Contest (CW)
- July 7 -- NCCC RTTY Sprint (digital)
- July 7 -- NCCC Sprint (CW)
- July 8 - 9 -- IARU HF World Championship (CW, phone)
- July 8 - 9 -- SKCC Weekend Sprintathon (CW)
- July 8 - 9 -- PODXS 070 Club 40m Firecracker Sprint (digital)
- July 9 -- QRP ARCI Summer Homebrew Sprint (CW)
- July 10 -- 4 States QRP Group 2nd Sunday Sprint (CW, phone)
- July 12 -- 432 VHF-UHF FT8 (FT8)
- July 12 -- RSGB 80m Club Champ, SSB (phone)



Visit the [ARRL Contest Calendar](#) for more events and information.

Upcoming Section, State, and Division Conventions

- August 19 - 20 | [Huntsville Hamfest](#), hosting the ARRL Alabama State Convention, Huntsville, Alabama
- September 1 - 3 | [Shelby Hamfest](#), hosting the ARRL North Carolina Section Convention, Shelby, North Carolina
- September 10 | [ARRL Southern New Jersey Section Convention and Hamfest](#), Mullica Hill, New Jersey
- September 22 - 23 | [HRO Superfest](#), hosting the ARRL Wisconsin State Convention, Milwaukee, Wisconsin

Search the [ARRL Hamfest and Convention Database](#) to find events in your area.



SWARC NEWS

Have News for ARRL?

Submissions for the ARRL Letter and ARRL News can be sent to news@arrl.org. -- John E. Ross, KD8IDJ, ARRL News [Editor](#)

ARRL -- Your One-Stop Resource for Amateur Radio News and Information

- [Join or Renew Today!](#) Eligible US-based members can elect to receive [QST](#) or [On the Air](#) magazine in print when they join ARRL or when they renew their membership. All members can access digital editions of all four ARRL magazines: *QST*, *On the Air*, *QEX*, and *NCJ*.
- Listen to [ARRL Audio News](#), available every Friday.
- *The ARRL Letter* is available in an accessible format, posted weekly to the [Blind-hams Groups.io](#) email group. The group is dedicated to discussions about amateur radio as it concerns blind hams, plus related topics including ham radio use of adaptive technology.



Subscribe to...

- [NCJ -- National Contest Journal](#). Published bimonthly, features articles by top contesters, letters, hints, statistics, scores, NA Sprint, and QSO parties.
- [QEX -- A Forum for Communications Experimenters](#). Published bimonthly, features technical articles, construction projects, columns, and other items of interest to radio amateurs and communications professionals.

Free of charge to ARRL members...



SWARC NEWS

- [Subscribe](#) to the *ARES Letter* (monthly public service and emergency communications news), the *ARRL Contest Update* (biweekly contest newsletter), Division and Section news alerts, and much more!
- Find ARRL on [Facebook](#)! Follow us on [Threads](#), [Twitter](#) and [Instagram](#)

The ARRL Letter is published Thursdays, 48 times each year. ARRL members may subscribe at no cost or unsubscribe by editing their Member Data Page at www.arrl.org/opt-in-out.

Copyright © 2023 American Radio Relay League, Incorporated. Use and distribution of this publication, or any portion thereof, is permitted for non-commercial or educational purposes, with attribution. All other purposes require written permission.

ARRL, The National Association for Amateur Radio®
225 Main Street, Newington CT, 06111-1400 USA
860-594-0200

www.arrl.org